PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

	agent's file reference	FOR FURTHER A	CTION	See Form PCT/IPEA/416					
T-536									
International application No.		International filing da	• •	Priority date (day/month/year)					
	2004/0139			18.09.2003					
	_	IPC) or national classification and							
C01B33/44, C08K9/04, C08L101/00									
Applicant									
TEIJIN LIMITED									
This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.									
	REPORT consists of		sheets, including	ng this cover sheet.					
1		panied by ANNEXES, comprising							
] , , , , ,	<u> </u>								
a. l	(30.11.0 11.10 11.1	pplicant and to the International Bu		sheets, as follows:					
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).								
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental									
	Box.								
b.	(sent to the In	ternational Bureau only) a total of	(indicate type and number	er of electronic carrier(s))					
				, containing a sequence listing and/or tables					
related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).									
4. This	report contains indic	cations relating to the following ite	ms:						
	Box No. I	Basis of the report							
	Box No. II Priority								
	Box No. III	•	h regard to novelty, inven	ntive step and industrial applicability					
	Box No. IV Lack of unity of invention								
j 🖂	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement								
	Box No. VI Certain documents cited								
	Box No. VII Certain defects in the international application								
	Box No. VIII Certain observations on the international application								
		Certain observations on the men							
Date of submi	ssion of the demand		Date of completion of t	his report					
			1 22						
Name and mailing address of the IPEA/JP			Authorized officer						
Facsimile No.			Telephone No.						

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/013977

Box	No. I	Basis of the report		
1.		regard to the language, this report is based on the internation ated under this item.	al application in the language in v	which it was filed, unless otherwise
		This report is based on translations from the original language which is the language of a translation furnished for the purpo		·
		international search (Rule 12.3 and 23.1(b))		
		publication of the international application (Rule 12.4)		
		international preliminary examination (Rule 55.2 and/o		have which the state of the state of
2.	recei	a regard to the elements of the international application, this is iving Office in response to an invitation under Article 14 are report): the international application as originally filed/furnished the description:	report is based on (replacement s e referred to in this report as "oi	neets wnich have been Jurnished to the riginally filed" and are not annexed to
	-	pages 1, 2, 6-10, 13, 15-18, 22-24, 26		as originally filed/furnished
		pages* 3-5,11,12,14,19-21,25	received by this Authority on	17.05.2005
		pages*		•
	\bowtie	the claims:	·	
		nos. 5,7-9		as originally filed/furnished
		nos.*		r with any statement) under Article 19
		nos.* 1,4,6		-
		nos.*		
	M	the drawings:		
	لاعا			as originally filed/furnished
		sheets fig. 1,2		as originally metricumshed
		sheets*		
	\Box			
1		a sequence listing and/or any related table(s) - see Supplem	emai Box Relating to Sequence L	residents.
3.	\bowtie	The amendments have resulted in the cancellation of:		
		the description, pages		
		the claims, nos. 2,3		
			·	
			- 45-10	
		any table(s) related to sequence listing (specify):	lanara and a second	I listed below had account to
4.		This report has been established as if (some of) the amend they have been considered to go beyond the disclosure as fi	tments annexed to this report and led, as indicated in the Supplement	nisted below had not been made, since ntal Box (Rule 70.2(c)).
		the description, pages		
		the claims, nos.		
		the drawings, sheets/figs		
		the sequence listing (specify):		
+	lf it	em 4 applies, some or all of those sheets may be marked "sup	erseded."	

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/013977

Statement			
Novelty (N)	Claims	1, 4-9	YES
	Claims		NO
Inventive step (IS)	Claims	1, 4-9	YES
	Claims		NO
Industrial applicability (IA)	Claims	1, 4-9	YES
	Claims		NO
	Citations and ex Statement Novelty (N) Inventive step (IS)	Statement Novelty (N) Claims Claims Inventive step (IS) Claims Claims Claims Claims Claims	Claims Industrial applicability (IA) Citations and explanations supporting such statement Statement Claims 1, 4-9 Claims 1, 4-9 Claims 1, 4-9 Claims 1, 4-9

2. Citations and explanations (Rule 70.7)

Document 1: JP 9-309720 A (Kao Corp.), 02 December 1997 Document 2: JP 2003-95640 A (Teijin Ltd.), 03 April 2003

The inventions set forth in claims 1 and 4 to 9 are novel and involve an inventive step in relation to documents 1 and 2 cited in the international search report. Documents 1 and 2 do not disclose the phyllosilicates that have a prescribed specific surface area and are capable of undergoing an ion exchange with prescribed organic onium ions, and it would not have been easy to conceive of the phyllosilicates in question, even for a person skilled in the art.